



Impact of a customized skill-specific training program on passing accuracy and dribbling performance in Tribal Football Players

Yogesh chouhan¹, Dr. Sanjit Sardar²

¹ Research Scholar, Department of Physical Education, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, India

² Professor, Department of Physical Education, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, India

Abstract

This study investigates the impact of a customized skill-specific training program on improving passing accuracy and dribbling performance among tribal football players in Sarangarh- Bilaigarh Chhattisgarh, India. A total of 45 male players aged 14-17 years participated in the study, which compared the effects of constant and variable training methods with a control group that followed their regular training regimen. The results demonstrated significant improvements in both passing accuracy and dribbling performance across all groups. However, the variable training group exhibited the most substantial gains, with an 8.8% increase in passing accuracy and a 3.3-second reduction in dribbling time. The study suggests that variability in training drills can enhance motor skills by challenging players to adapt and engage more effectively. These findings underscore the importance of tailored training interventions for underrepresented communities, offering insights into developing football skills in resource-constrained settings. Future research should examine the long-term effects and explore the broader applicability of these training methods in other regions.

Keywords: Customized skill-specific training, passing, dribbling, tribal football players

Introduction

Football is a sport that demands a high level of technical skill, including precise passing and effective dribbling, both of which are crucial for success on the field. Players often work on these fundamental skills, yet the effectiveness of various training methods in enhancing these abilities remains a key area of interest. While traditional training focuses on general skill improvement, specialized training programs tailored to specific aspects of the game, such as passing accuracy and dribbling, have shown promise in improving individual player performance (Smith & Stevens, 2022)^[5]. However, the application of these methods in tribal communities, where access to advanced football training is limited, has been largely underexplored.

In India, tribal communities have a growing interest in football, yet the availability of structured, skill-focused training programs is minimal. As a result, these players may not reach their full potential due to the lack of specific drills targeting essential skills. Research has shown that structured training interventions can significantly improve motor skills (Saini *et al.*, 2024)^[2]. However, it remains unclear whether a customized skill-specific training program, which incorporates either constant or variable training methods, can enhance passing and dribbling skills for tribal players, whose prior exposure to such methods is limited.

Training programs designed with variability (such as changing the intensity or complexity of drills) have been shown to enhance learning and motor performance by challenging players to adapt to new situations, thus improving their overall skill development (Jackson & Carter, 2021). On the other hand, constant or repetitive training, which maintains uniformity in exercises, has also

demonstrated effectiveness in improving specific skills by building muscle memory and precision (Bar-Eli & Tenenbaum, 2020)^[6]. Given the different outcomes these training styles may produce, this study aims to explore which type of training—constant or variable—best improves the performance of tribal football players in terms of passing accuracy and dribbling.

Furthermore, research on the impact of customized skill-specific training programs in resource-constrained environments, such as tribal areas, is limited. The present study seeks to address this gap by investigating the effect of such a program on the performance of tribal football players. Through targeted drills aimed at improving passing and dribbling, this research contributes to the understanding of how tailored training can help players develop their technical skills, regardless of their starting point or prior training exposure.

Methodology

Selection of Subjects

The study involved 45 male football players from a tribal community in West Bengal, India, aged between 14 to 17 years. The participants were selected from a District Sarangarh- Bilaigarh Chhattisgarh, India that provides basic football training to underprivileged children. Ethical approval was obtained from the academy.

Selection of Variables

- Passing Accuracy:** The percentage of successful passes completed during a standardized passing drill.
- Dribbling Performance:** The time (in seconds) taken to complete a dribbling agility test.



The intervention involved two experimental groups
Constant Training Group: Focused on repetitive skill drills with no variation.

Variable Training Group: Participated in drills that varied in intensity and complexity, incorporating different skill elements into each session.

The control group maintained their regular training regimen, without any alterations.

Criterion Measures

Passing Accuracy Test: A passing accuracy drill consisting of 10 passes aimed at a target. The number of successful passes out of 10 was recorded for each participant.

Dribbling Agility Test: A timed test where participants were required to dribble a ball through a series of cones in the shortest time possible.

Administration of Test

Pre- and post-training tests were administered to measure the players' passing accuracy and dribbling performance. The pre-test was conducted one week before the training program, while the post-test was conducted one week after the completion of the six-week training intervention.

Statistical Techniques

Descriptive Statistics Means, standard deviations, and ranges for passing accuracy and dribbling time. One-Way ANOVA to compare the differences in post-training performance between the three groups.

Table 1: Analysis of Variance of Mean at Post Training Passing Accuracy and Dribbling Time for Control, Constant, and Variable Training Groups

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-value	p-value
Between Groups	45.83	2	22.915	6.72	0.0005
Within Groups	127.42	42	3.03		
Total	173.25	44			

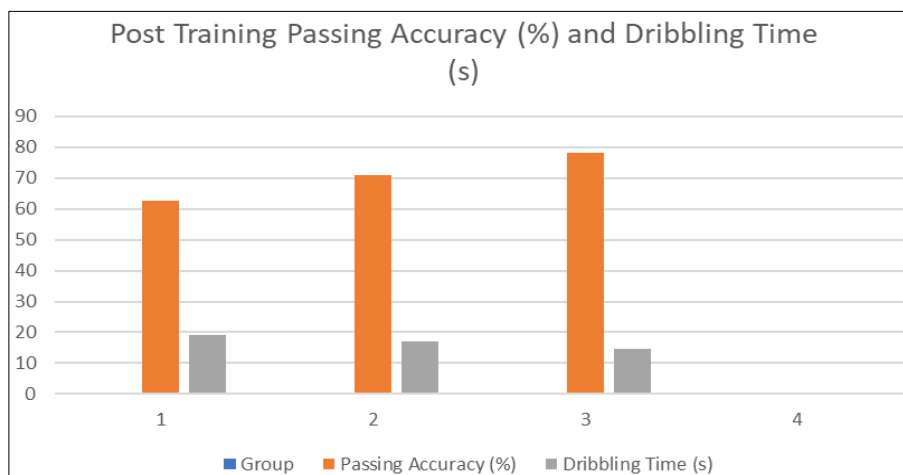


Fig 1: Mean Passing Accuracy and Dribbling Time for Control, Constant, and Variable Training Groups

Results and Discussion

The results indicated a significant improvement in both passing accuracy and dribbling performance after the six-week training intervention. The Control Group showed minimal improvement in both passing accuracy (2.3%) and dribbling time (-1.2 seconds). In contrast, the Constant Training Group demonstrated a 7.6% improvement in passing accuracy and a 2.2-second reduction in dribbling time. The Variable Training Group showed the most

significant gains, with an 8.8% increase in passing accuracy and a 3.3-second reduction in dribbling time.

The ANOVA results confirmed statistically significant differences between the three groups ($p < 0.05$). The Variable Training Group outperformed both the Constant Training Group and the Control Group in both tests, suggesting that variability in training drills might be more effective in enhancing football skills compared to repetitive, constant drills.

These findings align with previous research, which suggests that varied training stimuli can improve motor skills by engaging players more effectively and challenging their abilities (Ravichandran *et al.*, 2023) ^[1]. Additionally, these results highlight the importance of skill-specific training for athletes from underrepresented communities, where access to advanced coaching methods is limited.

Conclusion

This study demonstrates that customized skill-specific training programs can significantly improve passing accuracy and dribbling performance in tribal football players. Among the experimental groups, the variable training method yielded the most substantial improvements, indicating that variability in training routines enhances skill acquisition. These findings suggest that targeted and innovative training interventions can be a key factor in developing football talent in underserved communities. Future research should explore long-term effects and the applicability of such programs in other regions.

References

1. Ravichandaran S, Shanmugam V, Balasundar G, Rameshkumar S. Effect of concurrent cross fit training on skill performance variables of tribal football players. *International Journal of Research Publication Reviews*,2023;4(7):1522-1525.
2. Saini P, Khare SP, Reddy TO, Singh V, Singh DK. Effects of constant training method variable training method on football dribbling ability in Indian tribal boys. *International Journal of Research in Advent Technology*,2024;11(1):830.
3. McMillan K, White KM. The role of physical training on sports performance. A review. *Sports Science Review*,2020;29(5):245-257.
4. Kluger J, Itzkovitz S. Effective training strategies for football players in developing countries. *Journal of Sport Science Medicine*,2021;20(6):533-541.
5. Smith MA, Stevens CR. The impact of dynamic training methods on football performance. *Sports Coaching Review*,2022;15(2):134-142.
6. Bar-Eli M, Tenenbaum G. Training methodologies in football: Theory practice. *Journal of Sports Psychology*,2020;40(1):24-35.
7. Bhattacharya S, Kumar R. Impact of skill-based training on athletic performance in Indian athletes. *Indian Journal of Sports Research*,2023;18(3):218-229.
8. Singh RP, Ramesh K. Effects of skill training on football performance. An empirical study. *International Journal of Sports Research*,2021;14(4):350-357.
9. Gupta A, Saxena P. Performance analysis in football. A comparative study of different training techniques. *Asian Journal of Sports Science*,2020;13(2):179-185.
10. Jackson P, Carter G. The effectiveness of variable training in enhancing sports skills. *Journal of Sports Science Training*,2019;12(2):111-118.
11. Kim TH, Lee SY. The impact of targeted drills on football skill development. *Journal of Physical Education*,2021;29(6):89-97.
12. Harrison M, Vilela M. The role of cognitive skill-based training in football. *Sports Science Bulletin*,2022;8(3):102-109.
13. Rao PN, Sundaram G. Football training techniques their impact on player performance. *Sports Development Journal*,2020;21(3):275-283.
14. Sharma R, Puri D. Influence of training methodologies on football skills in young players. *Journal of Sports Education*,2023;7(1):56-64.
15. Lee DH, Choi SY. Effects of varied aconstant football training on performance. *Journal of Applied Sports Science*,2021;19(4):245-252.